EXHIBIT A



November 11, 2020

VIA UPS

Dwight H. Egan Chairman of the Board Co-Diagnostics, Inc. 2401 S. Foothill Drive, Suite D Salt Lake City, UT 84109

Re: Shareholder Demand Pursuant to Utah Code Ann. § 16-10a-740

Dear Mr. Egan:

The below firms represent Jason Reagan (the "Stockholder"), a current stockholder of Co-Diagnostics, Inc. ("Co-Diagnostics" or the "Company"). Pursuant to Utah Code § 16-10a-740 we write on behalf of the Stockholder to demand that the Company's Board of Directors (the "Board") take action to remedy breaches of fiduciary duties by certain current and/or former directors and executive officers of the Company, including yourself ("Egan"), Eugene Durenard ("Durenard"), Edward L. Murphy, Brent Satterfield ("Satterfield"), Reed Benson, James B. Nelson and Richard A. Serbin ("Serbin"). Collectively, the foregoing executive officers and/or directors of the Company will be referred to herein as "Management."

As you are aware, by reason of their positions as officers and/or directors of Co-Diagnostics and because of their ability to control the business and corporate affairs of Co-Diagnostics, members of Management owed and owe Co-Diagnostics and its shareholders the fiduciary obligations of good faith, loyalty, and due care. Management was and is required to use its utmost ability to control and manage Co-Diagnostics in a fair, just, and honest manner in compliance with all applicable federal, state, and local laws, rules, and regulations. Similarly, Management was and is required to remain informed as to how the Company conducts its business and affairs, and upon notice or information of imprudent, illegal, or unsound conditions, policies, or practices, make reasonable inquiry in connection therewith, and take steps to correct such conditions, policies, or practices, and, if necessary, make such disclosures as necessary to comply with all applicable laws. The Stockholder believes that Management has violated these core fiduciary duty principles causing Co-Diagnostics to suffer damages. More specifically, the Stockholder believes that Management purposefully made false and misleading statements regarding the accuracy of the Company's Covid-19 test.



I. FACTUAL BACKGROUND

A. Background of the Company

Co-Diagnostics was formed on April 18, 2013, as a Utah corporation. The Company went public in 2017. Co-Diagnostics' primary source of revenue was from selling diagnostics tests for Zika Virus, Tuberculosis, Hepatitis B, Hepatitis C, Malaria, Dengue Fever, and HIV. Its customers were primarily located in the Caribbean, in Central and South America, in North America, and in India.

B. Management Brings Co-Diagnostics into the Covid Testing Industry

According to Co-Diagnostics, it began developing Covid-19 tests rapidly using a technology called CoPrimer, which was developed and patented by Satterfield before the outbreak. Based on public reports, Co-Diagnostics used the CoPrimer technology to develop a Covid-19 diagnostics test within one week.

CoPrimer allegedly worked so well that Co-Diagnostics, despite its relatively small size, became the first company in the world to obtain the prestigious CE marking for its Covid-19 tests. The CE certification mark indicates conformity with health, safety, and environmental protection standards for products sold within the European Economic Area.

Co-Diagnostics announced on February 24, 2020, that it had received regulatory approval to sell in the European Community. It was the first U.S. company to receive approval for the export to Europe of Covid-19 test kits. Co-diagnostics' stock began to rise on the news. The stock traded at over \$15 per share at the end of February 2020, and at over \$17 per share in early March 2020.

On April 6, 2020, Co-Diagnostics became the first company to receive approval from the U.S. FDA for its Covid-19 tests under an Emergency Use Authorization, which permitted Co-Diagnostics' tests to be used by certified clinical laboratories in the U.S. for the diagnosis of Covid-19. The stock, which in the weeks after the CE announcement had settled to \$8 per share, began to climb again.

Co-Diagnostics rushed its product to market because it had many larger competitors who were also hurrying to get an accurate diagnostic test to market. After Co-Diagnostics obtained its certifications, it began selling millions of dollars' worth of Covid-19 tests to 50 countries and more than 12 states in the U.S.

During this time Co-Diagnostics was able to obtain lucrative contracts to provide testing to states and foreign countries. For example, Co-Diagnostics was going to provide the majority of the tests for a \$5 million contract with the state of Utah that ran from March 31, 2020 through May 30, 2020. Co-Diagnostics was also to provide tests for a contract with Iowa totaling \$26 million for approximately 540,000 testing kits.

C. Questions Arise Regarding the Accuracy of Co-Diagnostics' Test

On April 30, 2020, the *Salt Lake Tribune* published an article titled "This is a Potential Public Health Disaster': COVID-19 results from TestUtah.com are raising questions." The article questioned the accuracy of Co-Diagnostics tests being used at sites run by TestUtah.com.

Satterfield was quoted in the article, reassuring the public that the alleged inaccuracies were due to "population differences."

In response to the *Tribune*'s questions, Satterfield reassured the market that Co-Diagnostics' tests were between 99.52% and 100% accurate in unspecified FDA and European studies. Satterfield also said the company had received no complaints from anyone Co-Diagnostics supplied tests to in 50 countries.

On May 1, 2020, to allay public health and investor concerns, Co-Diagnostics issued a press release titled: "Co-Diagnostics, Inc. Releases COVID-19 Test Performance Data: Consistently Demonstrates 100% Sensitivity and 100% Specificity Across Independent Evaluations." The press release unequivocally stated that Co-Diagnostics Covid-19 tests were 100% accurate based on data gathered from across the world:

Co-Diagnostics, Inc. (Nasdaq:CODX) (the Company), a molecular diagnostics company with a unique, patented platform for the development of diagnostic tests, today released COVID-19 test performance data demonstrating 100% sensitivity and 100% specificity, the metrics used to determine accuracy in molecular diagnostics testing.

The data being released comes from independent evaluations of the performance of the Company's COVID-19 test in the field. These evaluations were conducted in Mexico by the Mexican Department of Epidemiology ("InDRE"), India, and elsewhere in the US and abroad. Each study concluded 100% concordance for both specificity and sensitivity.

In the press release, Satterfield did not mention that the tests might be less than 100% accurate—abandoning his recognition that the tests were between 99.52% and 100% accurate. Instead, Satterfield insisted that Co-Diagnostics' tests were 100% accurate based on the experimental data.

In remarking on the test's favorable limit of detection (LOD) results in the evaluations, Satterfield said:

"In diagnostics, the limit of detection or LOD is a single metric that helps inform the key metrics of sensitivity and specificity but is not relevant as a stand-alone data point. Other metrics that are important are availability, ease of use and throughput. In countries where we have been evaluated against other tests, we have consistently and repeatedly achieved 100% clinical sensitivity and specificity and you can't do better than that."

(emphasis added).

In practice, Co-Diagnostics results seemed to be even worse than these result rates would suggest. For example, the April 30th *Salt Lake Tribune* article reported that Co-Diagnostics tests being used by TestUtah.com resulted in only a 1% to 2% positive test rate even in symptomatic patients, suggesting that Co-Diagnostics tests were only accurately reporting half of the Covid-19 infections, suggesting an accuracy rate even worse than the 99.5% that Co-Diagnostics initially claimed and materially worse than the 100% accuracy rate Co-Diagnostics began to tout in early May.

The market, however, accepted Co-Diagnostics false claims of 100% accuracy -- resulting in a boon to the company's share price. For example, the following publications repeated Co-Diagnostics claims, amplifying their effect on the market:

- "Co-Diagnostics (CODX) said Friday its coronavirus test has proven 100% accurate in field testing leading CODX stock to rocket." Allison Gatlin, Investor's *Business Daily*, "Coronavirus Test Maker Soars As Its Diagnostic Proves 100% Accurate."
- "Co-Diagnostics says coronavirus test shows spotless sensitivity data in independent evaluations" *Proactiveinvestors.com*
- "Co-Diagnostics Is a Smart Way to Play Coronavirus Testing: The company's tests are reportedly 100% accurate in at least three countries" Louis Navellier, *Investorplace.com*

Co-Diagnostics' plan to repress negative reports about its tests seemed to work. On May 14, 2020, the stock reached an all-time high of \$29.72, an extraordinary climb from its \$0.8952 year-end 2019 price.

D. Durenard and Serbin Liquidate Their Personally Held Stock

While in possession of materially adverse inside information and while the Company's stock was trading at artificially inflated prices, Durenard and Serbin liquidated their personally held Co-Diagnostics stock.

On May 23, 2020, Durenard sold a total of 100,000 shares of Co-Diagnostics common stock for proceeds of over \$1.8 million.

On May 24, 2020, Serbin sold 50,000 shares of Co-Diagnostics common stock for proceeds of \$913,025.

II. THE TRUTH EMERGES

In the late morning and early afternoon of May 14, 2020, third parties revealed startling information about Co-Diagnostics' allegedly 100% accurate test.

The Salt Lake Tribune reported that TestUtah.com, which used tests developed by Co-Diagnostics, "declined to join other major Utah labs in a joint experiment to confirm one another's quality." Moreover, the Salt Lake Tribune revealed that TestUtah's tests [by Co-Diagnostics] "have a higher 'limit of detection' — that is, they require more of the virus to trigger a positive result — than most other coronavirus tests approved for sale in the U.S., according to an analysis by the life sciences publication BioCentury." This meant that Co-Diagnostics tests were likely to have a much higher false negative reporting rate, meaning that potentially thousands of infected people were inaccurately told that they did not have the disease, an observation that was consistent with earlier concerns about TestUtah's lower rate of positive test results.

The Salt Lake Tribune article also expressed concern relating to TestNebraska.com and TestIowa.com, testing services that also used Co-Diagnostics tests.

Also on May 14, 2020 Iowa Governor Kim Reynolds issued a public statement saying, "I'm pleased to announce that the State Hygienic Lab completed the Test Iowa validation process yesterday, achieving high ratings of 95 percent accuracy for determining positives and 99.7 percent accuracy for determining negatives." These results did not comport with statements previously made by Co-Diagnostics on May 1, 2020.

In fact, Satterfield himself has recently confessed that the lower positive rates for Co-Diagnostic's tests "has certainly got all of us scratching our heads a bit," and that the tests will correctly identify 95% of true positive results—a massive discrepancy from Co-Diagnostics' representations of 100% accuracy given that the tests are intended to be administered among hundreds of thousands or even millions of people.

Based on the release of third party information casting serious doubt as to Co-Diagnostics' bold claims of 100% accuracy, the stock price began to fall, closing the day at \$22.13 after hitting an intra-day low of \$18.35, a greater than 38% decrease in price within hours.

On a May 14, 2020 scheduled investor call Co-Diagnostics did report that it achieved record sales and that the start-up had finally, after nearly 7 years, reached profitability; however, it did not address the testing accuracy or sensitivity allegations or correct Satterfield's prior statements about tests being 100% accurate.

Rather, the call was described by *The Gazette*, a Cedar Rapids, Iowa publication covering TestIowa.com as sounding "more like Thanksgiving with drunk uncles — dogs were barking, people were swearing, and someone was moaning." *The Gazette* also accurately noted that "[n]one of Co-Diagnostics or Nomi Health's news releases about the Logix Smart tests have revealed how many tests have been sold, for how much, and so far all three testing initiatives in Iowa, Nebraska and Utah have been secretive about the tests and the results."

The same day, the United States FDA issued a press release about testing accuracy. Another, much larger drug company had created a diagnostic test for Covid-19 that was under increasing public scrutiny for apparent inaccuracy. The FDA announced to the public that:

"[t]he FDA looks at a variety of sources to identify and understand potential patterns or significant issues with the use of the Abbott test. *No diagnostic test will be 100% accurate* due to performance characteristics, specimen handling, or user error, which is why it is important to study patterns and identify the cause of suspected false results so any significant issues can be addressed quickly."

(emphasis added).

Based on the multiple third party sources revealing serious problems that were known, or should have been known, in advance of May 14, 2020, the stock price further fell to just over \$15 per share when markets opened on May 15, 2020.

By May 20, 2020, a statistician, Zhiyuan Sun, wrote an article specifically about Co-Diagnostics' allegedly 100% accurate Covid-19 test. Sun explained:

In May, Co-Diagnostics announced its COVID-19 in vitro test had been found to have 100% accuracy, 100% specificity (likelihood of preventing a false-negative error), and 100% sensitivity (likelihood of preventing a false-positive error), as per independent verification in laboratories across the world

The devil is in the details

To start off, Co-Diagnostics came to the conclusion that its test was 100% effective on all three diagnostic dimensions (specificity, accuracy, and sensitivity) based on studies with small sample sizes. For example, laboratory testing of the Logix test kit conducted in Australia involved about 100 COVID-19-positive patients and 100 COVID-19-negative patients. With a sample size that small, a low error rate, say 1% to 2%, could be really hard to detect. In fact, the study itself explicitly stated that the test could in fact be between 96% to 98% effective, rather than 100%.

In addition, the testing environment is by no means indicative of the actual prevalence of COVID-19 in the population at this point in the pandemic. Among the test samples, 50% contained SARS-CoV-2, and obviously, at this point, nowhere near half the people in the world have been exposed to the coronavirus. "But wait a minute!" the intelligent reader might say. "Nothing in the world is perfect, so who cares if a test's results are off by 1% or 3%? Effectiveness of 97% is still nothing short of an A-plus. You're just being a devil's advocate, Zhiyuan!" Unfortunately, this is one of the cases where it is critical to pay attention to the devil in the details. In fact, a 1% or 3% error rate can render a in vitro test almost useless. Here's why.

Let us assume, for the sake of argument, the true sensitivity of Logix is 98%, and its true specificity is also 98%. In other words, the probability of the test delivering a false positive is 2%, and the probability of the test returning a false negative is also 2%. Both of these values are directly stated as being probable in studies citing Logix's range of effectiveness, and they are valid assumptions given that the test

has not been fully vetted by the FDA or other regulators. It is also common knowledge that because there are not enough viral tests for the COVID-19, the number of people who have the virus is likely to be significantly higher than official figures. For example, it is estimated that up to 4.1% of the residents of Los Angeles County have COVID-19 antibodies. Let's use that 4.1% figure in our calculations as a measure of prevalence of COVID-19 (a lower prevalence would hurt the test even more). Assuming 1 million people are given the Logix test, 41,000 should test positive for an ongoing SARS-CoV-2 infection. However, if the test provides a false negative 2% of the time, only 98% of those 41,000 -- 40,180 -- would show up as positives.

On the other hand, out of the 959,000 people who were actually negative for the virus, a 2% error rate would yield 19,180 cases of false positives -- individuals who don't have the disease despite the test saying they do. All told, that makes 59,360 people getting positive results, but only 40,180 of them would actually be positive. That yields a predictive value of 67.7%. In other words, if the Logix test only works as well as it does in this scenario -- and it's right 98% of the time -- there's still a 1in-3 chance that the test will indicate you have COVID-19 even though you don't! As one can see, a 32.3% false-positive error rate isn't very good at all. This problem gets worse if we assume the same prevalence, but lower Logix's potential sensitivity and specificity estimates to 95% for both. In this scenario, the probability of getting a false positive increases to 55.2%! While the results are surprising, they nonetheless use the basics of conditional probability; here is a calculator in case you want to try it out for yourself. Furthermore, a recent New York University study on COVID-19 in vitro tests developed by Abbott Laboratories (NYSE:ABT) found them to be widely inaccurate and unacceptable for use in patients. Keep in mind, those tests were also promoted as having 100% sensitivity and 99.9% specificity in earlier investigations. Unfortunately, this just serves to highlight how difficult it is to develop an accurate test for diseases with a low rate of prevalence like COVID-19.

Co-Diagnostics knew that even a highly accurate test—such as 96%, 98%, or even 99%—was not the same, and not remotely as valuable, as a 100% accurate test.

II. DEMAND PURSUANT TO UTAH CODE ANN. § 16-10A-740

Based on these events, the Stockholder contends that Management breached its fiduciary duties of loyalty and good faith by issuing false and misleading statements regarding the accuracy of Co-Diagnostics' Covid tests and improper insider sales. As a result of the foregoing breaches of duty, Co-Diagnostics has sustained damages.

Accordingly, pursuant to Utah Code § 16-10A-740, on behalf of the Stockholder, we hereby demand that the Board: (i) undertake (or cause to be undertaken) an independent internal investigation into Management's violations of Utah and/or federal law; and (ii) commence a civil action against each member of Management to recover for the benefit of the Company the amount

of damages sustained by the Company as a result of their breaches of fiduciary duties alleged herein.

Pursuant to Utah law, if within ninety days after receipt of this letter the Board has not commenced an action as demanded herein, the Stockholder will commence a shareholder's derivative action on behalf of the Company seeking appropriate relief.

Very truly yours,

THE WEISER LAW FIRM, P.C.

James M. Ficaro

BRONSTEIN, GEWIRTZ & GROSSMAN, LLC

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